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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,842	01/22/2002	Heinz W. Meier	12751 B	3609

7590 05/05/2003

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EXAMINER

MAI, ANH T

ART UNIT PAPER NUMBER

2832

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/053,842	MEIER ET AL.
	Examiner	Art Unit
	Anh T. Mai	2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-4 and 8-11 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> .	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Objections

1. Claims 5-7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 3. See MPEP § 608.01(n). Accordingly, the **claims 5-7** have not been further treated on the merits.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no written description of “coil is open on one side, thereby generating a gap”. As best understood by the examiner, applicant discloses the “hinge provides flip open links between two circuit board halves and permit rotational movement of individual printed circuit board halves”.

There is no written description of “slitted” printed circuit board segment. If the board is slit, will it be a single piece?

In claim 4, “slitted” should be changed to “slit”.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4, 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Languages “coil is open on one side, thereby generating a gap” [claim 1] and “slitted” [claim 4] are indefinite due to lack of written description in the specification. Also, “that can be opened and then closed again” is not clear to understand whether the coil is “close” OR “open”.

With respect to claim 8, what is “printed circuit board for a conductor to be measured”? Is it the same as printed circuit board recited earlier in the claim? Is “printed conductors” in “via printed conductors” the same as recited earlier in the claim? Term “twistable” is vague. Anything can be twistable.

With respect to claim 9, what does applicant intend by “around several layers”?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 4, 8-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Gris et al. [US 5414400].

Gris discloses printed conductor and the ends of conductors connected by plating [abstract, figure 1] on a printed circuit board of layers 31, 41, 51.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gris et al. [US 5414400] in view of Furguson et al. [US 6195858].

With respect to claim 10, Gris discloses claimed invention except for two layers for incoming winding and two layers for returning winding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide additional layer for each winding, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With respect to claim 11, Gris discloses claimed invention except for electronic component arranged on circuit board. Ferguson discloses electronic component on the circuit board for purpose of sensing signal to the circuit [col 1, lines 20-25]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add electronic components to the circuit board as taught by Ferguson to Gris. The motivation would have been to provide the control for the circuit as desired function. Therefore, it would have been obvious to combine Ferguson with Gris.

Allowable Subject Matter

Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 2 recites inter alia, *the coil comprises two annular printed circuit board segments which are connected to each other on one side by a hinge.*

Claim 3 recites inter alia, *conductor ends of the coil winding on a first printed circuit board segment are connected by means of flexible conductors with the printed conductor ends of the coil winding on a second printed circuit board segment.*

The references of record do not teach or suggest the aforementioned limitation, nor would it be obvious to modify those references to include such limitation.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. O'Reilly et al. [US 6150915] ; Baudart [US 5461309].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 703-308-2900. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703-308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-746-8181 for After Final communications.

Art Unit: 2832

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

am
April 30, 2003



ANN MAI
PRIMARY EXAMINER